



08/26 70%

ABSTRACT OF THE DISCLOSURE

In an electronic ballast, an L-C series-resonant circuit is connected across the output of a full-bridge inverter while two Rapid-Start fluorescent lamps are series-connected across the tank capacitor of the L-C circuit. The full-bridge inverter is driven in such manner that the inverter's output voltage consists of a series of rectangular voltage pulses of alternating polarity and controllable width and frequency. When the lamps are fully powered, the inverter's output voltage consists of alternating pulses of frequency about equal to the natural resonance frequency of the L-C circuit and with each individual pulse-width about equal to half of the fundamental period of the natural resonance frequency of the L-C circuit. When the L-C circuit is unloaded, such as prior to lamp ignition, the inverter's output voltage consists of alternating pulses of frequency distinctly higher than the natural resonance frequency of the L-C circuit and with each individual pulse-width about equal to one tenth of the fundamental period of the natural resonance frequency of the L-C circuit.